Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Cereclor S52®	Not available	EECTOX Mollusk chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Mytilus edulis* (mussels)	flow-through, 60 days	0.22, 3.9 mg/L (measured)	50	There were no mortalities of the test animals exposed to the test material (Cereclor S52). A slight decrease in food consumption (filtration) at the higher concentration level was noted.	48 FR 53159; 11/25/83 OTS0507258
Cereclor S52®	Not available	EECTOX Chronic fish toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Rainbow trout	flow-through, 60 days	1.0, 1.05, 4.5 mg/L (measured)	30	The test material (Cereclor S52) was not toxic to the test animals. There were no sub-lethal or behavioral effects observed.	48 FR 53159; 11/25/83 OTS0507258
Cereclor S52®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rabbits	oral (gavage), day 6-27 of gestation	10, 30, 100 mg/kg/d	16 pregnant females	Exposure to the test material (Cereclor S52) caused no treatment-related effects to mean maternal body weight, number of litters with malformations, or developmental and genetic variations. Treatment with the test material did not induce teratogenic responses at any of the doses tested.	48 FR 20132; 5/4/83 OTS0507252
Cereclor S52®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (gavage), day 6-19 of gestation	500, 2000, 5000 mg/kg/d	25 pregnant females	Test animals exposed to the test material (Cereclor S52) at 5000 mg/kg/day exhibited an increased incidence of wet matted and yellow stained haircoat in the anogenital area and soft stool. There were no dose-related differences in mean maternal weight gain, mean uterus weight, and fetal malformations when compared to the controls.	49 FR 30114; 7/26/84 OTS0507334
Cereclor S52®	Not available	HESTOX Subchronic study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (dietary), 13 wks	10, 100, 625 mg/kg/d	15 male; 15 female	Animals exposed to the test material (Cereclor S52) exhibited a slight decrease in body weight gain at 625 mg/kg/day. There were slight increases in serum total protein and cholesterol in females at 625 mg/kg/day. Kidney weights were increased in both sexes at 100 and 625 mg/kg/day. The toxicological no-effect level was 10 mg/kg/day.	49 FR 44124; 11/2/84 OTS0507338
Chlorowax 40®	Not available	EECTOX Chronic fish toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Rainbow trout	flow-through, 60 days	0.97, 1.0, 4.0 mg/L (measured)	30	The test material (Chlorowax 40) was not toxic to the test animals. There were no sub-lethal or behavioral effects observed.	48 FR 53159; 11/25/83 OTS0507258

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 40®	Not available	EECTOX Mollusk chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Mytilus edulis* (mussels)	flow-through, 60 days	0.12, 2.18 mg/L (measured)	50	There were no mortalities of the test animals exposed to the test material (Chlorowax 40). A slight decrease in food consumption (filtration) at the higher concentration level was noted.	48 FR 53159; 11/25/83 OTS0507258
Chlorinated Paraffins: C23, 43%[1]	Not available	HECTOXCARC Carcinogenicity study	National Toxicology Program (NTP)	F344/N rats	gavage, 5x/wk for 103 weeks	0, 875, 3750 mg/kg (male); 0, 100, 300, 900 mg/kg (female)	50 male 50 female	No evidence of carcinogenicity in male rats at either dose level. Equivocal evidence of carcinogenicity in female rats as shown by an increased incidence of adrenal gland medullary pheochromocytomas.	NTP TR-305, May 1986, NTIS PB86248093/AS
Chlorinated Paraffins: C23, 43%	Not available	HECTOXCARC Carcinogenicity study	National Toxicology Program (NTP)	$B6C3F_1$ mice	gavage, 5x/wk for 103 weeks	0, 2500, 5000 mg/kg	50 male 50 female	Equivocal evidence of carcinogenicity in male mice as shown by an increased incidence of malignant lymphomas. Equivocal evidence of carcinogenicity in female mice as shown by a marginal increase in the incidence of hepatocellular neoplasms.	NTP TR-305, May 1986, NTIS PB86248093/AS
Chlorowax 40®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rabbits	oral (gavage), day 6-27 of gestation	500, 2000, 5000 mg/kg/day	unreported number of pregnant females	Results showed that 3 test animals aborted with the test material (Chlorowax 40), 1 at 2000, and 2 at 5000 mg/kg/day. In the high dose group, there was a slight increase in mean post-implantation loss and a slight decrease in the mean number of viable fetuses when compared to the control. There were no treatment-related effects on mean maternal body weight gain observed at any dose level.	48 FR 12124; 3/23/83 OTS0507250
Chlorowax 40®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rat	oral (gavage in corn oil), gestation day 6 through 19	0, 500, 2000, 5000 mg/kg/d	25 mated females	One high-dose female died. No evidence of teratogenicity was noted at any treatment level, nor of embryotoxicity or fetotoxicity.	48 FR 20132; 5/4/83 OTS0507331
Chlorowax 40®	Not available	HESTOX Subchronic study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats, mice	oral (gavage), 1x/d; 5 d/wk; 13 wks	235, 469, 938, 1875, 3750 mg/kg (rats) 469, 938, 1875, 3750, 7500 mg/kg (mice)	10 male; 10 female	The test material (Chlorowax 40) produced a yellow discoloration of the ingesta in the small intestines of the rats. Scattered white foci were observed in the livers of a small number of female rats. Hepatic lesions were noted in high dose (3750 mg/kg) female rats. In mice, there were no treatment-related or dose-related lesions caused by the test material. The test material appeared to be non-toxic to both rats and mice.	49 FR 44124; 11/2/84 OTS0507336

[1]Commercial-grade material similar to Clorowax 40C® without added stabilizers.

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 500C®	Not available	EEATOX Chironomid sediment toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Chironomus tentans* (midges)	static, 48 hr	18-162 µg/L	20 (5/replicate)	No adverse effects were noted up to the limits of solubility.	48 FR 53159; 11/25/83 OTS0507261
Chlorowax 500C®	Not available	EEATOX Mysid shrimp acute toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	mysid shrimp	flow-through, 96 hr	14.9 - 84.4 µg/L (mean measured)	20 (5/replicate)	The 96-hour LC_{50} was 14.1 µg/L.	49 FR 5187; 2/10/84 OTS0507326
Chlorowax 500C®	Not available	EEATOX Algae acute toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Skeletonema costatum* (marine alga)	static, 10 days	4.5, 6.7, 12.1, 19.6, 43.1, 69.8 µg/L (measured)	Not applicable	The test material (Chlorowax 500C) caused a significant decrease in the growth rate of the test species at concentrations of 19.6 µg/L and above. The EC_{50} (population growth) value (and 95% confidence limit) was 42.3 µg/L (27.3 to 93.1 µg/L).	48 FR 53159; 11/25/83 OTS0507260
Chlorowax 500C®	Not available	EEATOX Algae acute toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Selenastrum capricornutum* (green alga)	10 days	0.18, 0.32, 0.56, 1.0, 1.8, 3.2 mg/L (nominal)	Not applicable	The test material (Chlorowax 500C) had an EC_{50} (population growth) value (and 95% confidence interval) of 1.31 mg/L (0.88 to 4.06 mg/L).	48 FR 53159; 11/25/83 OTS0507258
Chlorowax 500C®	Not available	EEATOX Daphnid acute toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Daphnia magna*	static, 48 hr	11 to 380 µg/L (mean measured)	20 (5/replicate)	The 48-hour EC_{50} (immobilization) was 530 µg/L. The test substance caused the daphnids to float on or near the surface at measured concentrations of 75 µg/L.	48 FR 53159; 11/25/83 OTS0507330
Chlorowax 500C®	Not available	EEBIOC Bioconcentration study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	mussels	flow-through, 147 days	2.35, 10.1 µg/L (mean measured)	130	The test material (Chlorowax 500C) at the higher concentration level killed 33% of the original test animals during the exposure period. At the lower concentration level, 7% of the original test animals died. The BCFs for the whole test animal were 40.9 x 10^3 (high concentration) and 24.8 x 10^3 (lower concentration).	49 FR 5187; 2/10/84 OTS0507328
Chlorowax 500C®	Not available	EEBIOC Bioconcentration study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Rainbow trout	flow-through, 168 days	3.1, 14.3 µg/L (mean measured)	100	The test material (Chlorowax 500C) did not cause any mortalities or adverse effects at any of the concentrations tested. The bioconcentration factors (BCF) ranged from 2800 to 16000 in the liver, 11700 to 15500 in the viscera, and 3600 to 5300 for the whole fish.	49 FR 5187; 2/10/84 OTS0507327
Chlorowax 500C®	Not available	EECLIF Fish early life stage study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Sheepshead minnow	flow-through, 28 days	2.4, 4.1, 6.4, 22.1, 54.8 µg/L (measured)	40 (5/replicate)	The test material (Chlorowax 500C) did not cause any significant effects on hatchability of embryos or on survival of larvae compared to the controls. The no-observed-effect concentration was 54.8 µg/L.	49 FR 5187; 2/10/84 OTS0507320

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 500C®	Not available	EECTOX Mollusk chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Mytilus edulis* (mussels)	flow-through, 60 days	0.071, 0.13, 0.93 mg/L (measured)	50	The LC_{50} (and 95% confidence level) for the test material (Chlorowax 500C) was 0.074 mg/L (0.068 to 0.081 mg/L).	48 FR 53159; 11/25/83 OTS0507258
Chlorowax 500C®	Not available	EECTOX Chironomid chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Chironomus tentans* (midges)	49 days	61-394 µg/L	100 (25/replicate)	Animals exposed to the test material (Chlorowax 500C) produced no adults at concentration levels of 121 and 394 µg/L. The maximum acceptable toxicant concentration (MATC) for the test material was estimated to be >78 and <121 µg/L.	48 FR 53159; 11/25/83 OTS0507261
Chlorowax 500C®	Not available	EECTOX Mysid shrimp chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	mysid shrimp	flow-through, 28 days	0.6 to 7.3 µg/L (mean measured)	20 (10/replicate)	No effects were noted on survival, sexual maturation, reproduction, or final size at any treatment level. The maximum acceptable toxicant concentration (MATC) was >7.3 µg/L.	49 FR 5187; 2/10/84 OTS0507326
Chlorowax 500C®	Not available	EECTOX Chronic fish toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Rainbow trout	flow-through, 60 days	0.34, 1.07, 3.05 mg/L (measured)	30	The test material (Chlorowax 500C) had an LC_{50} value (and 95% confidence level) of 0.34 mg/L (0.23 to 0.50 mg/L). At all concentration levels, the test animals displayed abnormal behavior (lethargy and a slow response to the presence of food).	48 FR 53159; 11/25/83 OTS0507258
Chlorowax 500C®	Not available	EECTOX Daphnid chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Daphnia magna*	flow-through, 21 days	3.2, 5.6, 10, 18 µg/L (nominal)	20 (10/replicate)	Parent test animals exposed to the test material (Chlorowax 500C) had total mortalities at measured concentrations of 16.3 µg/L and above within 6 days. The 6 to 21 day LC50 value (and 95% confidence limit) was 12.0 µg/L (9.0 to 16.0 µg/L). Offspring exposed to 8.9 µg/L (measured) had a 37% mortality. There were no observed effects on reproduction and growth among the test animals (after 21 days) exposed to 5.6 µg/L. The MATC was between 5.0 and 8.9 µg/L.	48 FR 53159; 11/25/83 OTS0507330

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 500C®	Not available	EFBDEG Anaerobic biodegradation/ inhibition	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Not applicable	Digester, anaerobic sewage sludge, 10 days	0.56% to 10% w/w (with respect to digester volatile suspended solids (VS) content)	Not applicable	The toxicity of the test substance to the anaerobic sewage sludge digestion process were assessed by measurement of the degree of inhibition of gas production at various time intervals. The data show that significant (>10%) inhibition of gas production occurred at concentrations of 3.2, 5.6 and 10% (w/w) on VS during the first 3-4 days and continued until day 10 when the experiment was terminated. Concentrations of 0.56, 1.0 and 1.8% (w/w) on VS did not significantly affect digest gas production. It was concluded that concentrations >3.2% (w/w) on VS may cause transient partial inhibition of gas production. However, recovery of affected microorganisms is likely to be rapid with no long-term effects.	48 FR 53159; 11/25/83 OTS0507328
Chlorowax 500C®	Not available	EFBDEG Inherent Biodegradability	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Not applicable	aerobic, 28 days, 22 °C, 200 mg/L activated sludge	25 and 50 mg of carbon/L	Not applicable	Biodegradation was followed by CO_2 evolution by OECD method 203B. No significant biodegradation of chlorinated paraffin occurred under the test conditions. Values of 16.0% and 7.4% of theoretical carbon dioxide evolution were obtained at 25 and 50 mg of carbon/L, respectively. No significant inhibition was noted.	48 FR 53159; 11/25/83 OTS0507259, Docket OPTS-44003
Chlorinated Paraffins: C12, 60%[2]	Not available	HECTOXCARC Carcinogenicity study	National Toxicology Program (NTP)	F344/N rats	gavage, 5x/wk for 2 yr	0, 312, 625 mg/kg	70 male 70 female	Clear evidence of carginogenicity based on increased incidence of hepatocellular neoplasms (primarily neoplastic nodules) in male and female rats, of adenomas or adenocarcinomas (combined) of the kidney tubular cells in male rats, and of follicular cell adenomas or carcinomas (combined) of the thyroid gland in female rats. Mononuclear cell leukemia in dosed males was also reported.	NTP TR-308, May 1986, NTIS PB86248101/AS
Chlorinated Paraffins: C12, 60%	Not available	HECTOXCARC Carcinogenicity study	National Toxicology Program (NTP)	B6C3F, mice	gavage, 5x/wk for 2 yr	0, 125, 250 mg/kg	50 male 50 female	Clear evidence of carginogenicity based on increased incidence of hepatocellular adenomas and of adenomas or carcinomas (combined) in male and female mice and increased incidences of adenomas or adenomas and carcinomas (combined) of thyroid gland follicular cells in female rats.	NTP TR-308, May 1986, NTIS PB86248101/AS

[2]Commercial-grade material similar to Clorowax 500C® without added stabilizers.

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 500C®	Not available	HEGTOXTRFM Transformation study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	mice	*in vitro*	31.25, 62.5, 125, 250, 500 µg/mL (non-activation); 6.25, 12.5, 25, 50, 100 µg/mL (activation)	Not specified	The LC_{50} of the test material (Chlorowax 500C) was 44 µg/mL in the absence of metabolic activation and 58 µg/mL in the presence of metabolic activation. In both cases there were increased transformed colonies.	47 FR 54160; 12/1/82 OTS0507248
Chlorowax 500C®	Not available	HEGTOXCHRM Rodent dominant lethal assay	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (gavage) in corn oil, 5 days	0, 250, 750, 2000 mg/kg/d	15 males	No evidence of mutagenicity was noted by dominant lethal assay.	49 FR 5187; 2/10/84 OTS0507331
Chlorowax 500C®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (gavage), day 6-19 of gestation	0, 100, 500, 2000 mg/kg/d	15 pregnant females	There were no treatment-related effects in test animals that received 100 mg/kg/day of the test material (Chlorowax 500C). At 500 and 2000 mg/kg/day, observations included yellow and brown staining of the anogenital haircoat, soft stool, red and brown staining in the nasal region, decreased activity, oily haircoats, emaciation, and excessive salivation. At 2000 mg/kg/day, there was a statistically significant increase in the number of postimplantation losses, and a decrease in the number of viable fetuses. Missing or shortened digits were observed in 19 fetuses from 3 out of 15 litters examined.	48 FR 12124; 3/23/83 OTS0507250
Chlorowax 500C®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rabbits	oral (gavage), day 6-27 of gestation	10, 30, 100 mg/kg/d	unreported number of pregnant females	The appearance and behavior of the test animals was unaffected by treatment with the test material (Chlorowax 500C). The predominant observations were hair loss on the ventral neck and thorax and reduced amounts of fecal matter (which occurred in all groups). Embryotoxicity at 100 mg/kg/day was evident in 2 test animals with early whole litter reabsorption. The mean numbers of corpora lutea, total implantations, viable fetuses, mean fetal body weight, and fetal sex distribution were not statistically significant when compared to the controls.	48 FR 34119; 7/2783 OTS0507252

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Chlorowax 500C®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Mallard duck	oral (dietary), 22 wks	28, 166, 1000 ppm	20 male; 20 female	No treatment-related effects from the test material (Chlorowax 500C) were observed in adult test animals on survival, physical condition, body weight, and food consumption. There was a slight decrease as compared to controls from exposure to 1000 ppm in eggshell thickness and 14-day viability. There were no differences found in eggshell thickness or viability at 28 and 166 ppm. In hatchlings, there were no treatment-related effects observed in any of the dose levels tested. The no-observable-effect dietary concentration was 166 ppm.	49 FR 44142; 11/2/84 OTS0507340
Chlorowax 500C®	Not available	HESTOX Subchronic study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats, mice	oral (gavage), 1x/d; 5 d/wk; 13 wks	625, 1250, 2500, 5000 mg/kg (rats) 125, 250, 500, 1000, 2000 mg/kg (mice)	10 male; 10 female	Rats exposed to the test material (Chlorowax 500C), at 2500 and 5000 mg/kg exhibited decreased weight gain. Clinical signs of decreased activity for 2 hours after dosing were observed in all male and female rats treated with 625, 1250, 2500, and 5000 mg/kg. Enlargement of the liver was observed at all dose levels in both males and females. Male and female mice exposed to 500, 1000, and 2000 mg/kg of test material exhibited decreased weight gain and liver enlargement.	49 FR 44124; 11/2/84 OTS0507337
Chlorowax 500C®	Not available	HESTOX Subchronic study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (dietary), 13 wks	10, 100, 625 mg/kg/d	15 male; 15 female	Males exposed to 625 mg/kg/day of the test material (Chlorowax 500C) exhibited a slight decrease in body weight gain and food consumption. An increase in water consumption was observed in both males and females. Slight reductions in hemoglobin and hematocrit were exhibited among high dosed test animals of both sexes. At 100 and 625 mg/kg/day, there were slight changes in total protein, cholesterol, and glucose levels, increased liver weights, and hepatocellular hypertrophy.	49 FR 44124; 11/2/84 OTS0507333
Electrofine S70®	Not available	EECTOX Chronic fish toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	Rainbow trout	flow-through, 60 days	1.0, 2.1, 3.8 mg/L (measured)	30	The test material (Electrofine S70) was not toxic to the test animals at any of the concentrations tested. There were no mortalities or behavioral changes noted.	48 FR 53159; 11/25/83 OTS0507258
Electrofine S70®	Not available	EECTOX Mollusk chronic toxicity	Non-TSCA Protocol/Guideline (docket OPTS-42004)	*Mytilus edulis* (mussels)	flow-through, 60 days	0.46, 1.33 mg/L (measured)	Not specified	There were no mortalities to the test animals exposed to the test material (Electrofine S70). Feeding (filtration) activity was slightly reduced at the higher concentration, but normal at the lower concentration.	48 FR 53159; 11/25/83 OTS0507258

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Electrofine S70®	Not available	HECTOXTRFM Transformation study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	mice	*in vitro*	625, 1250, 2500,5000,10000 µg/mL (non-activation); 6.25, 12.5, 25, 50, 100 µg/mL (activation)	Not specified	The test material (Electrofine S70) produced an LC_{50} of 10 µg/mL in the absence of metabolic activation and 294 µg/mL in the presence of metabolic activation. In both cases, there were large dose-related increases in transformed colonies	47 FR 54160; 12/1/82 OTS0507248
Electrofine S70®	Not available	HEGTOXCHRM Mammalian bone marrow chromosomal aberration assay	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (gavage), 1x/d, 5 days	0, 500, 1500, 5000 mg/kg/d	8 males	No evidence of increased chromosomal aberrations were noted at any treatment level.	49 FR 5187; 2/10/84 OTS0507331
Electrofine S70®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rats	oral (gavage), day 6-19 of gestation	500, 2000, 5000 mg/kg/d	25 pregnant females	There were no dose-related differences between test animals exposed to the test material (Electrofine S70) in body weight, body weight gain, gestational period, fetal malformations, and development when compared to the controls.	49 FR 30114; 7/26/84 OTS0507334
Electrofine S70®	Not available	HERTOXTERA Developmental study	Non-TSCA Protocol/Guideline (docket OPTS-42004)	rabbits	oral (gavage), day 6-27 of gestation	100, 300,1000 mg/kg/d	16 pregnant females	Exposure to the test material (Electrofine S70) caused no treatment-related effects in maternal appearance, behavior, body weight gain, or in the occurrence of genetic and developmental variations in the treatment groups compared to the controls. No evidence of teratogenicity was noted.	48 FR 53159; 11/25/83 OTS0507257